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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,368

09/21/2006

Thomas Friedlaender

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EXAMINER

TISCHLER, FRANCES

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

12/24/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/575,368	<b>Applicant(s)</b> FRIEDLAENDER ET AL.	
	<b>Examiner</b> FRANCES TISCHLER	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 21 is/are pending in the application.
- 4a) Of the above claim(s) 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/11/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of Group I, claims 1 – 17 and 21, in the reply filed on 10/1/09 is acknowledged.

### ***Specification***

The abstract of the disclosure is objected to because the language “degree of contamination found the analyzing in step and conducting” is confusing. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claim1 – 17 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Fine et al (US 5,688,693).**

**Fine** discloses (abstract, figures, 1:14 – 25, 6:24 – end, claims 1 – 12) a method for reprocessing used plastic PET bottles and containers comprising the analysis and decontamination of contaminants. The decontamination process parameters are a function of the degree of contamination and are combined into contaminant groups as

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claimed by Applicant since Fine discloses to first separate the gross contaminants from the waste which is performed by shredding said waste. The shredded plastic is then tested for further contamination of a lesser degree (since the grossest contaminants have been separated after said shredding). This is accomplished with sniffing apparatus or optical scanner at elevated temperatures and the plastic and contaminants are sorted. The plastic is decontaminated by washing and tested again, this time for a third type and amount of contaminants, mostly vapors. Badly contaminated material is removed from the recycled material (2:5 – 12). The elevated temperature reads on the temperature process parameter of the present claim. A vacuum pump is used to collect volatile contaminants (4:22 – 27), reading on the concentration process parameter of the present claim. Fine discloses a rate for the plastic bottles to move per minute in a conveyor belt as the contaminants are sampled and said rate can be varied (4:10 – 39), reading on the time process parameter of the present claim.

A microprocessor controller is provided for controlling the operation of air injector, evacuator sample, residue analyzer, reject mechanism and fan. For instance, the reject mechanism receives a signal from the microprocessor when to divert a contaminated bottle (4:40 – end, 5:1 – 24), reading on Applicant's use of threshold value analysis and predetermined values to determine how to proceed.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1 – 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krieg et al (IS 6,509,537) in view of Fine et al (US 5,688,693).**

Fine's disclosure is discussed above and is incorporated herein by reference.

**Krieg** discloses (abstract, figures, 1:54 -62, 1:54 – 62, 2:33 – 54, 4:7 – 53, claim 1) a method for detecting and evaluating contaminants in waste plastic bottles such as PET, with laser beams, analyzing, classifying and sorting said contaminants into different groups, as claimed in the present application. Detection of contamination is done through programmed logic, calculated calibration vectors and comparison with reference data stored in data memory, reading on Applicant's data analysis and comparison with predetermined data. The concentration of the contaminants is detected through spectral analysis, reading on Applicant's concentration as a process parameter. The process is done in real time, reading on Applicant's time as a process parameter.

Krieg analyzes and determines the contamination in waste plastic bottles but is silent as to a decontamination treatment.

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It would have been obvious to one of ordinary skill in the art to have decontaminated Krieg's contaminated waste bottles in the manner disclosed by Fine since both inventions disclose similar methods of detecting and separating contaminants from waste plastic PET bottles and one of ordinary skill in the art would have known that if one goes through a process of identifying contaminants in plastic, decontamination should be performed in order to be able to use the plastic again. For the above reasons, it would also have been obvious to one of ordinary skill in the art to have used Fine's temperature as a decontamination process parameter in Krieg's process as part of a decontamination process.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANCES TISCHLER whose telephone number is (571)270-5458. The examiner can normally be reached on Monday-Friday 7:30AM - 5:00 PM; off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ling-Siu Choi/  
Primary Examiner, Art Unit 1796

Frances Tischler  
Examiner  
Art Unit 1796

/FT/